

Trying 3106016892...Open

Welcome to STN International! Enter x:x

LOGINID:sssptal653hxp

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

| | | |
|--------------|-----------|---|
| NEWS 1 | | Web Page URLs for STN Seminar Schedule - N. America |
| NEWS 2 | Dec 17 | The CA Lexicon available in the CAPLUS and CA files |
| NEWS 3 | Feb 06 | Engineering Information Encompass files have new names |
| NEWS 4 | Feb 16 | TOXLINE no longer being updated |
| NEWS 5 | Apr 23 | Search Derwent WPINDEX by chemical structure |
| NEWS 6 | Apr 23 | PRE-1967 REFERENCES NOW SEARCHABLE IN CAPLUS AND CA |
| NEWS 7 | May 07 | DGENE Reload |
| NEWS 8 | Jun 20 | Published patent applications (A1) are now in USPATFULL |
| NEWS 9 | JUL 13 | New SDI alert frequency now available in Derwent's DWPI and DPCI |
| NEWS 10 | Aug 23 | In-process records and more frequent updates now in MEDLINE |
| NEWS 11 | Aug 23 | PAGE IMAGES FOR 1947-1966 RECORDS IN CAPLUS AND CA |
| NEWS 12 | Aug 23 | Adis Newsletters (ADISNEWS) now available on STN |
| NEWS 13 | Sep 17 | IMSworld Pharmaceutical Company Directory name change to PHARMASEARCH |
| NEWS 14 | Oct 09 | Korean abstracts now included in Derwent World Patents Index |
| NEWS 15 | Oct 09 | Number of Derwent World Patents Index updates increased |
| NEWS 16 | Oct 15 | Calculated properties now in the REGISTRY/ZREGISTRY File |
| NEWS 17 | Oct 22 | Over 1 million reactions added to CASREACT |
| NEWS 18 | Oct 22 | DGENE GETSIM has been improved |
| NEWS 19 | Oct 29 | AAASD no longer available |
| NEWS 20 | Nov 19 | New Search Capabilities USPATFULL and USPAT2 |
| NEWS 21 | Nov 19 | TOXCENTER(SM) - new toxicology file now available on STN |
| NEWS 22 | Nov 29 | COPPERLIT now available on STN |
| NEWS 23 | Nov 29 | DWPI revisions to NTIS and US Provisional Numbers |
| NEWS 24 | Nov 30 | Files VETU and VETB to have open access |
| NEWS 25 | Dec 10 | WPINDEX/WPIDS/WPIX New and Revised Manual Codes for 2002 |
| NEWS 26 | Dec 10 | DGENE BLAST Homology Search |
| NEWS 27 | Dec 17 | WELDASEARCH now available on STN |
| NEWS 28 | Dec 17 | STANDARDS now available on STN |
| NEWS 29 | Dec 17 | New fields for DPCI |
| NEWS 30 | Dec 19 | CAS Roles modified |
| NEWS 31 | Dec 19 | 1907-1946 data and page images added to CA and Caplus |
| NEWS EXPRESS | August 15 | CURRENT WINDOWS VERSION IS V6.0c, CURRENT MACINTOSH VERSION IS V6.0 (ENG) AND V6.0J (JP), AND CURRENT DISCOVER FILE IS DATED 07 AUGUST 2001 |
| NEWS HOURS | | STN Operating Hours Plus Help Desk Availability |
| NEWS INTER | | General Internet Information |
| NEWS LOGIN | | Welcome Banner and News Items |
| NEWS PHONE | | Direct Dial and Telecommunication Network Access to STN |
| NEWS WWW | | CAS World Wide Web Site (general information) |

Enter NEWS followed by the item number or name to see news on that

specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 16:53:22 ON 28 DEC 2001

=> file medline, uspatful, dgene, embase, scisearch, wpids, jiscst, japio, wpix, fsta, frosti, agricola, toxlit

'JISCST' IS NOT A VALID FILE NAME

Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files that are available. If you have requested multiple files, you can specify a corrected file name or you can enter "IGNORE" to continue accessing the remaining file names entered.

ENTER A FILE NAME OR (IGNORE):jicst

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|------------------|---------------|
| FULL ESTIMATED COST | 0.30 | 0.30 |

FILE 'MEDLINE' ENTERED AT 16:54:13 ON 28 DEC 2001

FILE 'USPATFULL' ENTERED AT 16:54:13 ON 28 DEC 2001

CA INDEXING COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'DGENE' ENTERED AT 16:54:13 ON 28 DEC 2001

COPYRIGHT (C) 2001 DERWENT INFORMATION LTD

FILE 'EMBASE' ENTERED AT 16:54:13 ON 28 DEC 2001

COPYRIGHT (C) 2001 Elsevier Science B.V. All rights reserved.

FILE 'SCISEARCH' ENTERED AT 16:54:13 ON 28 DEC 2001

COPYRIGHT (C) 2001 Institute for Scientific Information (ISI) (R)

FILE 'WPIDS' ENTERED AT 16:54:13 ON 28 DEC 2001

COPYRIGHT (C) 2001 DERWENT INFORMATION LTD

FILE 'JICST-EPLUS' ENTERED AT 16:54:13 ON 28 DEC 2001

COPYRIGHT (C) 2001 Japan Science and Technology Corporation (JST)

FILE 'JAPIO' ENTERED AT 16:54:13 ON 28 DEC 2001

COPYRIGHT (C) 2001 Japanese Patent Office (JPO)

FILE 'WPIX' ENTERED AT 16:54:13 ON 28 DEC 2001

COPYRIGHT (C) 2001 DERWENT INFORMATION LTD

FILE 'FSTA' ENTERED AT 16:54:13 ON 28 DEC 2001

COPYRIGHT (C) 2001 International Food Information Service

FILE 'FROSTI' ENTERED AT 16:54:13 ON 28 DEC 2001

COPYRIGHT (C) 2001 Leatherhead Food Research Association

FILE 'AGRICOLA' ENTERED AT 16:54:13 ON 28 DEC 2001

FILE 'TOXLIT' ENTERED AT 16:54:13 ON 28 DEC 2001

=> s retro-inverted peptide

L1 28 RETRO-INVERTED PEPTIDE

=> d l1 ti abs ibib tot

L1 ANSWER 1 OF 28 USPATFULL

TI Retro-, inverso- and retro-inverso synthetic peptide analogues
AB Synthetic peptide antigen analogues of native peptide antigens with partial or complete retro, inverso or retro-inverso modifications are provided. When administered as an immunogen to an immunocompetent host the synthetic peptide antigen analogues induce the production of antibodies which recognize the native peptide antigen. Uses of these analogues, vaccines and methods of preparing vaccines comprising these antigen analogues, and antibodies generated using these antigen analogues are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:111840 USPATFULL
TITLE: Retro-, inverso- and retro-inverso synthetic peptide analogues
INVENTOR(S): Comis, Alfio, Bossley Park, Australia
Tyler, Margaret Isabel, Turramurra, Australia
Fischer, Peter, Oslo, Norway
PATENT ASSIGNEE(S): Deakin Research Limited, New South Wales, Australia (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|--------------------------|
| PATENT INFORMATION: | US 6261569 | B1 | 20010717 |
| | WO 9405311 | | 19940317 |
| APPLICATION INFO.: | US 1997-909551 | | 19970812 (8) |
| | WO 1993-AU441 | | 19930827 |
| | | | 19950424 PCT 371 date |
| | | | 19950424 PCT 102(e) date |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 387932, now abandoned | | |

| | NUMBER | DATE |
|-----------------------|--|----------|
| PRIORITY INFORMATION: | AU 1992-4374 | 19920827 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | GRANTED | |
| PRIMARY EXAMINER: | Allen, Marianne P. | |
| ASSISTANT EXAMINER: | Zeman, Mary K. | |
| LEGAL REPRESENTATIVE: | Howson and Howson | |
| NUMBER OF CLAIMS: | 16 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 12 Drawing Figure(s); 10 Drawing Page(s) | |
| LINE COUNT: | 1585 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 2 OF 28 USPATFULL

TI Retro-inverso analogues of thymopentin and the method for their synthesis
AB New analogues of thymopentin (TP5) and of its tetrapeptide fragment (TP5.sup.1-4) containing two non-contiguous retro-inverted bonds in the peptide chain are described which are of the general formula (I) ##STR1## where R is hydrogen or an acyl radical, and R.sup.1 is an --OR.sup.2 group or an ##STR2## group where R.sup.2 is a hydrogen atom or a hydrocarbon radical, and R.sup.3 is a hydrogen atom or a hydroxyl group, and the corresponding pharmaceutically acceptable salts of acid or basic addition, possess immunomodulating activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 93:46534 USPATFULL

TITLE: Retro-inverso analogues of thymopentin and the method for their synthesis

INVENTOR(S): Mariotti, Sabina, Fara Sabina, Italy
Sisto, Alessandro, Rome, Italy
Nencioni, Luciano, Poggibonsi, Italy
Villa, Luigi, Florence, Italy
Verdini, Antonio S., Monterotondo, Italy

PATENT ASSIGNEE(S): Sclavo S.p.A., Siena, Italy (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 5218089 | | 19930608 |
| APPLICATION INFO.: | US 1991-799421 | | 19911126 (7) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1989-454282, filed on 21 Dec 1989, now patented, Pat. No. US 5091510 | | |

| | NUMBER | DATE |
|-----------------------|---------------------------|----------|
| PRIORITY INFORMATION: | IT 1988-23099 | 19881223 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | Granted | |
| PRIMARY EXAMINER: | Lee, Lester L. | |
| ASSISTANT EXAMINER: | Davenport, A. M. | |
| LEGAL REPRESENTATIVE: | Hedman, Gibson & Costigan | |
| NUMBER OF CLAIMS: | 8 | |
| EXEMPLARY CLAIM: | 1 | |
| LINE COUNT: | 906 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 3 OF 28 USPATFULL

TI Renin inhibitors having all **retro-inverted peptide** bonds

AB Renin-inhibiting peptides of the formula ##STR1## in which X represents a group of the formula ##STR2## represents hydroxyl, alkoxy having up to 8 carbon atoms, benzyloxy or a group of the formula --NR.sup.4 R.sup.5,

A, B, D and E are identical or different and in each case

represent a direct bond,

represent a radical of the formula ##STR3## in which Q1 denotes oxygen, sulphur or the methylene group

represent a grouping of the formula ##STR4## m represents a number 0, 1 or 2, and L represents a group of the formula --CH.sub.2 NR.sup.2 R.sup.3

and physiologically acceptable salts thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 92:18951 USPATFULL

TITLE: Renin inhibitors having all **retro-inverted peptide** bonds

INVENTOR(S): Bender, Wolfgang, Wuppertal, Germany, Federal Republic of
Kinast, Gunther, Wuppertal, Germany, Federal Republic of
Knorr, Andreas, Erkrath, Germany, Federal Republic of
Stasch, Johannes-Peter, Wuppertal, Germany, Federal

PATENT ASSIGNEE(S): Federal Republic of
Bayer Aktiengesellschaft, Leverkusen, Germany, Federal
Republic of (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|--------------|
| PATENT INFORMATION: | US 5095006 | | 19920310 |
| APPLICATION INFO.: | US 1990-553493 | | 19900713 (7) |

| | NUMBER | DATE |
|-----------------------|----------------------------|----------|
| PRIORITY INFORMATION: | DE 1989-3926021 | 19890508 |
| | DE 1990-4004820 | 19900216 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | Granted | |
| PRIMARY EXAMINER: | Wax, Robert A. | |
| ASSISTANT EXAMINER: | Walsh, Stephen | |
| LEGAL REPRESENTATIVE: | Sprung Horn Kramer & Woods | |
| NUMBER OF CLAIMS: | 9 | |
| EXEMPLARY CLAIM: | 1 | |
| LINE COUNT: | 2702 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 4 OF 28 USPATFULL

TI Retro-inverso analogues of thymopentin, and their use in the
preparation

of pharmaceutical compositions

AB New analogues of thymopentin (TP5) and of its tetrapeptide fragment
(TP5.sup.1-4) containing two non-contiguous retro-inverted bonds in the
peptide chain are described.

The new compounds, of general formula (I) ##STR1## where R is hydrogen
or an acyl radical, and

R.sup.1 is an --OR.sup.2 group or an ##STR2## group where R.sup.2 is a
hydrogen atom or a hydrocarbon radical, and R.sup.3 is a hydrogen atom
or a hydroxyl group,

and the corresponding pharmaceutically acceptable salts of acid or
basic
addition, possess immunomodulating activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 92:15136 USPATFULL
TITLE: Retro-inverso analogues of thymopentin, and their use
in the preparation of pharmaceutical compositions
INVENTOR(S): Mariotti, Sabina, Fara Sabina, Italy
Sisto, Alessandro, Rome, Italy
Nencioni, Luciano, Poggibonsi, Italy
Villa, Luigi, Florence, Italy
Verdini, Antonio S., Monterotondo, Italy
PATENT ASSIGNEE(S): Scalvo, S.p.A., Siena, Italy (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|--------------|
| PATENT INFORMATION: | US 5091510 | | 19920225 |
| APPLICATION INFO.: | US 1989-454282 | | 19891221 (7) |

| | NUMBER | DATE |
|-----------------------|----------------|----------|
| PRIORITY INFORMATION: | IT 1988-23099 | 19881223 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | Granted | |
| PRIMARY EXAMINER: | Lee, Lester L. | |

ASSISTANT EXAMINER: avenport, A.
LEGAL REPRESENTATIVE: edman, Gibson & Costigan
NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1
LINE COUNT: 786
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 5 OF 28 USPATFULL
TI Retro-inverso C-terminal hexapeptide analogues of substance P
AB New retro-inverso peptides and peptide derivatives in the form of
 analogues of C-terminal hexapeptide fragments of Substance P, which are
 pharmacologically active, possess prolonged action with time, and are
of
 general formula (I): ##STR1## they being useful as vasedilators.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 87:4926 USPATFULL
TITLE: Retro-inverso C-terminal hexapeptide analogues of
 substance P
INVENTOR(S): Verdini, Antonio S., Rome, Italy
 Viscomi, Giuseppe C., Rome, Italy
PATENT ASSIGNEE(S): ENI-Ente Nazionale Idrocarburi, Rome, Italy (non-U.S.
 corporation)

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|----------------|
| PATENT INFORMATION: | US 4638046 | | 19870120 |
| APPLICATION INFO.: | US 1985-689911 | | 19850109 (6) |

| | NUMBER | DATE |
|-----------------------|----------------------------------|----------|
| PRIORITY INFORMATION: | IT 1984-19142 | 19840113 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | Granted | |
| PRIMARY EXAMINER: | Phillips, Delbert R. | |
| LEGAL REPRESENTATIVE: | Hedman, Gibson, Costigan & Hoare | |
| NUMBER OF CLAIMS: | 15 | |
| EXEMPLARY CLAIM: | 1 | |
| LINE COUNT: | 406 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 6 OF 28 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD
TI **Retro-inverted peptide** used to deliver
 active agents across the gastrointestinal tract to treat hypertension,
 diabetes, osteoporosis, haemophilia, anaemia, cancer, migraines and
 angina pectoris -
AB This invention relates to retro-inverted peptides which specifically
bind
 to the gastro-intestinal tract receptor HPT1, hPEPT1, D2H or hSI. Also
 included in the invention are a **retro-inverted**
 peptide which enhances the delivery of an active agent across the
 gastrointestinal tract (GIT) into the systemic, portal or hepatic
 circulation. A composition comprising a **retro-inverted**
 peptide bound to a material comprising an active agent used to
 treat a mammalian disease or disorder is also disclosed in the
invention.
 The retro-inversion peptides target gastrointestinal tract transport
 receptors to promote in vivo uptake of active agents and/or enhance
 active agent delivery across the tract into the systemic circulation.
The
 gastrointestinal agents (containing retro-inverted peptides) are used to
 facilitate the transport of active ingredients through human or animal
 gastrointestinal tissue, from the lumen to the portal, hepatic, or
 systemic circulation. The compositions containing these agents can be

used to treat or prevent mammalian, especially human, diseases or disorders, especially hypertension, diabetes, osteoporosis, haemophilia, anaemia, cancer, migraine, and angina pectoris. The compositions can be administered in vivo to image selected sites or tissues, such as the gastrointestinal tract, by using an imaging agent as the active agent. The present sequence represents a peptide from which a retro-inversion peptide of the invention is created. The peptide is the full length

HAX42

amino acid sequence.

ACCESSION NUMBER: AAB03872 peptide DGENE

TITLE: **Retro-inverted peptide** used to deliver active agents across the gastrointestinal tract to treat hypertension, diabetes, osteoporosis, haemophilia, anaemia, cancer, migraines and angina pectoris -

INVENTOR: O'Mahony D J

PATENT ASSIGNEE: (ELAN-N)ELAN CORP PLC.

PATENT INFO: WO 2000031123 A2 20000602

36p

APPLICATION INFO: WO 1999-IE117 19991119

PRIORITY INFO: US 1998-109038 19981119

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: 2000-400037 [34]

Apple.

L1 ANSWER 7 OF 28 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD

TI **Retro-inverted peptide** used to deliver active agents across the gastrointestinal tract to treat hypertension, diabetes, osteoporosis, haemophilia, anaemia, cancer, migraines and angina pectoris -

AB This invention relates to retro-inverted peptides which specifically bind

to the gastro-intestinal tract receptor HPT1, hPEPT1, D2H or hSI. Also included in the invention are a **retro-inverted**

peptide which enhances the delivery of an active agent across the gastrointestinal tract (GIT) into the systemic, portal or hepatic circulation. A composition comprising a **retro-inverted**

peptide bound to a material comprising an active agent used to treat a mammalian disease or disorder is also disclosed in the

invention.

The retro-inversion peptides target gastrointestinal tract transport receptors to promote in vivo uptake of active agents and/or enhance active agent delivery across the tract into the systemic circulation.

The

gastrointestinal agents (containing retro-inverted peptides) are used to facilitate the transport of active ingredients through human or animal gastrointestinal tissue, from the lumen to the portal, hepatic, or systemic circulation. The compositions containing these agents can be used to treat or prevent mammalian, especially human, diseases or disorders, especially hypertension, diabetes, osteoporosis, haemophilia, anaemia, cancer, migraine, and angina pectoris. The compositions can be administered in vivo to image selected sites or tissues, such as the gastrointestinal tract, by using an imaging agent as the active agent. The present sequence represents a peptide from which a retro-inversion peptide of the invention is created. The peptide is the full length PAX2 amino acid sequence.

ACCESSION NUMBER: AAB03871 peptide DGENE

TITLE: **Retro-inverted peptide** used to deliver active agents across the gastrointestinal tract to treat hypertension, diabetes, osteoporosis, haemophilia, anaemia, cancer, migraines and angina pectoris -

INVENTOR: O'Mahony D J

PATENT ASSIGNEE: (ELAN-N)ELAN CORP PLC.

PATENT INFO: WO 2000031123 A2 20000602

36p

APPLICATION INFO: WO 1999-IE117 19991119

PRIORITY INFO: US 1998-109038 19981119

DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 2000-400037 [34]

L1 ANSWER 8 OF 28 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD
TI **Retro-inverted peptide** used to deliver active agents across the gastrointestinal tract to treat hypertension, diabetes, osteoporosis, haemophilia, anaemia, cancer, migraines and angina pectoris -

AB This invention relates to retro-inverted peptides which specifically bind to the gastro-intestinal tract receptor HPT1, hPEPT1, D2H or hSI. Also included in the invention are a **retro-inverted peptide** which enhances the delivery of an active agent across the gastrointestinal tract (GIT) into the systemic, portal or hepatic circulation. A composition comprising a **retro-inverted peptide** bound to a material comprising an active agent used to treat a mammalian disease or disorder is also disclosed in the invention.

The retro-inversion peptides target gastrointestinal tract transport receptors to promote in vivo uptake of active agents and/or enhance active agent delivery across the tract into the systemic circulation.

The gastrointestinal agents (containing retro-inverted peptides) are used to facilitate the transport of active ingredients through human or animal gastrointestinal tissue, from the lumen to the portal, hepatic, or systemic circulation. The compositions containing these agents can be used to treat or prevent mammalian, especially human, diseases or disorders, especially hypertension, diabetes, osteoporosis, haemophilia, anaemia, cancer, migraine, and angina pectoris. The compositions can be administered in vivo to image selected sites or tissues, such as the gastrointestinal tract, by using an imaging agent as the active agent. The present sequence represents a peptide from which a retro-inversion peptide of the invention is created. The peptide is a fragment of HAX42.

ACCESSION NUMBER: AAB03870 peptide DGENE

TITLE: **Retro-inverted peptide** used to deliver active agents across the gastrointestinal tract to treat hypertension, diabetes, osteoporosis, haemophilia, anaemia, cancer, migraines and angina pectoris -

INVENTOR: O'Mahony D J

PATENT ASSIGNEE: (ELAN-N)ELAN CORP PLC.

PATENT INFO: WO 2000031123 A2 20000602

36p

APPLICATION INFO: WO 1999-IE117 19991119

PRIORITY INFO: US 1998-109038 19981119

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: 2000-400037 [34]

L1 ANSWER 9 OF 28 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD

TI **Retro-inverted peptide** used to deliver active agents across the gastrointestinal tract to treat hypertension, diabetes, osteoporosis, haemophilia, anaemia, cancer, migraines and angina pectoris -

AB This invention relates to retro-inverted peptides which specifically bind to the gastro-intestinal tract receptor HPT1, hPEPT1, D2H or hSI. Also included in the invention are a **retro-inverted peptide** which enhances the delivery of an active agent across the gastrointestinal tract (GIT) into the systemic, portal or hepatic circulation. A composition comprising a **retro-inverted peptide** bound to a material comprising an active agent used to treat a mammalian disease or disorder is also disclosed in the invention.

The retro-inversion peptides target gastrointestinal tract transport

receptors to promote in vivo uptake of active agents and/or enhance active agent delivery across the tract into the systemic circulation.

The

gastrointestinal agents (containing retro-inverted peptides) are used to facilitate the transport of active ingredients through human or animal gastrointestinal tissue, from the lumen to the portal, hepatic, or systemic circulation. The compositions containing these agents can be used to treat or prevent mammalian, especially human, diseases or disorders, especially hypertension, diabetes, osteoporosis, haemophilia, anaemia, cancer, migraine, and angina pectoris. The compositions can be administered in vivo to image selected sites or tissues, such as the gastrointestinal tract, by using an imaging agent as the active agent. The present sequence represents a peptide from which a retro-inversion peptide of the invention is created. The peptide is a fragment of P31.

ACCESSION NUMBER: AAB03869 peptide DGENE

TITLE: **Retro-inverted peptide** used to deliver active agents across the gastrointestinal tract to treat hypertension, diabetes, osteoporosis, haemophilia, anaemia, cancer, migraines and angina pectoris -

INVENTOR: O'Mahony D J

PATENT ASSIGNEE: (ELAN-N)ELAN CORP PLC.

PATENT INFO: WO 2000031123 A2 20000602 36p

APPLICATION INFO: WO 1999-IE117 19991119

PRIORITY INFO: US 1998-109038 19981119

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: 2000-400037 [34]

L1 ANSWER 10 OF 28 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD

TI **Retro-inverted peptide** used to deliver active agents across the gastrointestinal tract to treat hypertension, diabetes, osteoporosis, haemophilia, anaemia, cancer, migraines and angina pectoris -

AB This invention relates to retro-inverted peptides which specifically bind

to the gastro-intestinal tract receptor HPT1, hPEPT1, D2H or hSI. Also included in the invention are a **retro-inverted**

peptide which enhances the delivery of an active agent across the gastrointestinal tract (GIT) into the systemic, portal or hepatic circulation. A composition comprising a **retro-inverted**

peptide bound to a material comprising an active agent used to treat a mammalian disease or disorder is also disclosed in the

invention.

The retro-inversion peptides target gastrointestinal tract transport receptors to promote in vivo uptake of active agents and/or enhance active agent delivery across the tract into the systemic circulation.

The

gastrointestinal agents (containing retro-inverted peptides) are used to facilitate the transport of active ingredients through human or animal gastrointestinal tissue, from the lumen to the portal, hepatic, or systemic circulation. The compositions containing these agents can be used to treat or prevent mammalian, especially human, diseases or disorders, especially hypertension, diabetes, osteoporosis, haemophilia, anaemia, cancer, migraine, and angina pectoris. The compositions can be administered in vivo to image selected sites or tissues, such as the gastrointestinal tract, by using an imaging agent as the active agent. The present sequence represents a peptide from which a retro-inversion peptide of the invention is created. The peptide is a fragment of PAX2.

ACCESSION NUMBER: AAB03868 peptide DGENE

TITLE: **Retro-inverted peptide** used to deliver active agents across the gastrointestinal tract to treat hypertension, diabetes, osteoporosis, haemophilia, anaemia, cancer, migraines and angina pectoris -

INVENTOR: O'Mahony D J

PATENT ASSIGNEE: (ELAN-N) ELAN CORP PLC.
PATENT INFO: WO 2000031123 A2 20000602
APPLICATION INFO: WO 1999-IE117 19991119
PRIORITY INFO: US 1998-109038 19981119
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 2000-400037 [34]

36p

L1 ANSWER 11 OF 28 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD
TI **Retro-inverted peptide** used to deliver
active agents across the gastrointestinal tract to treat hypertension,
diabetes, osteoporosis, haemophilia, anaemia, cancer, migraines and
angina pectoris -
AB This invention relates to retro-inverted peptides which specifically
bind to the gastro-intestinal tract receptor HPT1, hPEPT1, D2H or hSI. Also
included in the invention are a **retro-inverted**
peptide which enhances the delivery of an active agent across the
gastrointestinal tract (GIT) into the systemic, portal or hepatic
circulation. A composition comprising a **retro-inverted**
peptide bound to a material comprising an active agent used to
treat a mammalian disease or disorder is also disclosed in the
invention.

The retro-inversion peptides target gastrointestinal tract transport
receptors to promote in vivo uptake of active agents and/or enhance
active agent delivery across the tract into the systemic circulation.

The gastrointestinal agents (containing retro-inverted peptides) are used to
facilitate the transport of active ingredients through human or animal
gastrointestinal tissue, from the lumen to the portal, hepatic, or
systemic circulation. The compositions containing these agents can be
used to treat or prevent mammalian, especially human, diseases or
disorders, especially hypertension, diabetes, osteoporosis, haemophilia,
anaemia, cancer, migraine, and angina pectoris. The compositions can be
administered in vivo to image selected sites or tissues, such as the
gastrointestinal tract, by using an imaging agent as the active agent.
The present sequence represents a retro-inversion used in the invention.
The sequence is a HAX42 14 mer fragment D form retro-inversion peptide.

ACCESSION NUMBER: AAB03867 peptide DGENE

TITLE: **Retro-inverted peptide** used to
deliver active agents across the gastrointestinal tract to
treat hypertension, diabetes, osteoporosis, haemophilia,
anaemia, cancer, migraines and angina pectoris -

INVENTOR: O'Mahony D J

PATENT ASSIGNEE: (ELAN-N) ELAN CORP PLC.

PATENT INFO: WO 2000031123 A2 20000602

36p

APPLICATION INFO: WO 1999-IE117 19991119

PRIORITY INFO: US 1998-109038 19981119

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: 2000-400037 [34]

L1 ANSWER 12 OF 28 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD

TI **Retro-inverted peptide** used to deliver
active agents across the gastrointestinal tract to treat hypertension,
diabetes, osteoporosis, haemophilia, anaemia, cancer, migraines and
angina pectoris -

AB This invention relates to retro-inverted peptides which specifically
bind to the gastro-intestinal tract receptor HPT1, hPEPT1, D2H or hSI. Also

included in the invention are a **retro-inverted**
peptide which enhances the delivery of an active agent across the
gastrointestinal tract (GIT) into the systemic, portal or hepatic
circulation. A composition comprising a **retro-inverted**

peptide bound to a material comprising an active agent used to treat a mammalian disease or disorder is also disclosed in the invention.

The retro-inversion peptides target gastrointestinal tract transport receptors to promote in vivo uptake of active agents and/or enhance active agent delivery across the tract into the systemic circulation.

The

gastrointestinal agents (containing retro-inverted peptides) are used to facilitate the transport of active ingredients through human or animal gastrointestinal tissue, from the lumen to the portal, hepatic, or systemic circulation. The compositions containing these agents can be used to treat or prevent mammalian, especially human, diseases or disorders, especially hypertension, diabetes, osteoporosis, haemophilia, anaemia, cancer, migraine, and angina pectoris. The compositions can be administered in vivo to image selected sites or tissues, such as the gastrointestinal tract, by using an imaging agent as the active agent. The present sequence represents a retro-inversion used in the invention. The sequence is a P31 16 mer fragment D form retro-inversion peptide.

ACCESSION NUMBER: AAB03866 peptide DGENE

TITLE: **Retro-inverted peptide** used to deliver active agents across the gastrointestinal tract to treat hypertension, diabetes, osteoporosis, haemophilia, anaemia, cancer, migraines and angina pectoris -

INVENTOR: O'Mahony D J

PATENT ASSIGNEE: (ELAN-N)ELAN CORP PLC.

PATENT INFO: WO 2000031123 A2 20000602 36p

APPLICATION INFO: WO 1999-IE117 19991119

PRIORITY INFO: US 1998-109038 19981119

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: 2000-400037 [34]

L1 ANSWER 13 OF 28 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD

TI **Retro-inverted peptide** used to deliver active agents across the gastrointestinal tract to treat hypertension, diabetes, osteoporosis, haemophilia, anaemia, cancer, migraines and angina pectoris -

AB This invention relates to retro-inverted peptides which specifically bind

to the gastro-intestinal tract receptor HPT1, hPEPT1, D2H or hSI. Also included in the invention are a **retro-inverted**

peptide which enhances the delivery of an active agent across the gastrointestinal tract (GIT) into the systemic, portal or hepatic circulation. A composition comprising a **retro-inverted**

peptide bound to a material comprising an active agent used to treat a mammalian disease or disorder is also disclosed in the

invention.

The retro-inversion peptides target gastrointestinal tract transport receptors to promote in vivo uptake of active agents and/or enhance active agent delivery across the tract into the systemic circulation.

The

gastrointestinal agents (containing retro-inverted peptides) are used to facilitate the transport of active ingredients through human or animal gastrointestinal tissue, from the lumen to the portal, hepatic, or systemic circulation. The compositions containing these agents can be used to treat or prevent mammalian, especially human, diseases or disorders, especially hypertension, diabetes, osteoporosis, haemophilia, anaemia, cancer, migraine, and angina pectoris. The compositions can be administered in vivo to image selected sites or tissues, such as the gastrointestinal tract, by using an imaging agent as the active agent. The present sequence represents a retro-inversion used in the invention. The sequence is a PAX2 15 mer fragment D form retro-inversion peptide.

ACCESSION NUMBER: AAB03865 peptide DGENE

TITLE: **Retro-inverted peptide** used to

deliver active agents across the gastrointestinal tract to treat hypertension, diabetes, osteoporosis, haemophilia, anaemia, cancer, migraines and angina pectoris -

INVENTOR: O'Mahony D J
PATENT ASSIGNEE: (ELAN-N)ELAN CORP PLC.
PATENT INFO: WO 2000031123 A2 20000602 36p
APPLICATION INFO: WO 1999-IE117 19991119
PRIORITY INFO: US 1998-109038 19981119
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 2000-400037 [34]

L1 ANSWER 14 OF 28 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD

TI Retro-inverted neurotrophic and analgesic peptides

AB The present invention describes retro-inverted (RI) peptides encompassing

the active neurotrophic region of saposin C stimulating neurite outgrowth

and prevent neural cell death, and also promoting increased myelination in neural cells. The retro-inverted peptides can be used for stimulating neuritogenesis or preventing cell death, for stimulating myelination or preventing demyelination, or for treating pain in mammals. The RI peptidase may be used in the treatment of Parkinson's disease, retinal neuropathy, multiple sclerosis, acute disseminated leukoencephalitis, trauma to the brain and/or spinal cord, progressive multifocal leukoencephalitis, metachromatic leukodystrophy, adrenal leukodystrophy and maldevelopment of the white matter in premature infants (periventricular leucomalacia). The major advantage of retro inverted (RI) peptides is their enhanced activity in vivo due to improved resistance to proteolytic degradation. The present sequence represents a peptide from the present invention.

ACCESSION NUMBER: AAW99841 peptide DGENE
TITLE: Retro-inverted neurotrophic and analgesic peptides
INVENTOR: O'Brien J S; White M T; Wright D E
PATENT ASSIGNEE: (MYEL-N)MYELOS NEUROSCIENCES CORP.
PATENT INFO: WO 9912967 A1 19990318 37p
APPLICATION INFO: WO 1998-US18759 19980909
PRIORITY INFO: US 1998-148030 19980903
US 1997-926015 19970909
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 1999-229223 [19]

L1 ANSWER 15 OF 28 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD

TI Retro-inverted neurotrophic and analgesic peptides

AB The present invention describes retro-inverted (RI) peptides encompassing

the active neurotrophic region of saposin C stimulating neurite outgrowth

and prevent neural cell death, and also promoting increased myelination in neural cells. The retro-inverted peptides can be used for stimulating neuritogenesis or preventing cell death, for stimulating myelination or preventing demyelination, or for treating pain in mammals. The RI peptidase may be used in the treatment of Parkinson's disease, retinal neuropathy, multiple sclerosis, acute disseminated leukoencephalitis, trauma to the brain and/or spinal cord, progressive multifocal leukoencephalitis, metachromatic leukodystrophy, adrenal leukodystrophy and maldevelopment of the white matter in premature infants (periventricular leucomalacia). The major advantage of retro inverted (RI) peptides is their enhanced activity in vivo due to improved resistance to proteolytic degradation. The present sequence represents a peptide from the present invention.

ACCESSION NUMBER: AAW99840 peptide DGENE
TITLE: Retro-inverted neurotrophic and analgesic peptides

INVENTOR: O'Brien J S; White M T; Wright D E
PATENT ASSIGNEE: (MYEL-N)MYELOS NEUROSCIENCES CORP.
PATENT INFO: WO 9912967 A1 19990318
APPLICATION INFO: WO 1998-US18759 19980909
PRIORITY INFO: US 1998-148030 19980903
US 1997-926015 19970909
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 1999-229223 [19]

37p

L1 ANSWER 16 OF 28 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD

TI Retro-inverted neurotrophic and analgesic peptides

AB The present invention describes retro-inverted (RI) peptides encompassing

the active neurotrophic region of saposin C stimulating neurite outgrowth

and prevent neural cell death, and also promoting increased myelination in neural cells. The retro-inverted peptides can be used for stimulating neuritogenesis or preventing cell death, for stimulating myelination or preventing demyelination, or for treating pain in mammals. The RI peptidase may be used in the treatment of Parkinson's disease, retinal neuropathy, multiple sclerosis, acute disseminated leukoencephalitis, trauma to the brain and/or spinal cord, progressive multifocal leukoencephalitis, metachromatic leukodystrophy, adrenal leukodystrophy and maldevelopment of the white matter in premature infants (periventricular leucomalacia). The major advantage of retro inverted (RI) peptides is their enhanced activity in vivo due to improved resistance to proteolytic degradation. The present sequence represents a peptide from the present invention.

ACCESSION NUMBER: AAW99846 peptide DGENE

TITLE: Retro-inverted neurotrophic and analgesic peptides

INVENTOR: O'Brien J S; White M T; Wright D E

PATENT ASSIGNEE: (MYEL-N)MYELOS NEUROSCIENCES CORP.

PATENT INFO: WO 9912967 A1 19990318

37p

APPLICATION INFO: WO 1998-US18759 19980909

PRIORITY INFO: US 1998-148030 19980903

US 1997-926015 19970909

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: 1999-229223 [19]

L1 ANSWER 17 OF 28 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD

TI Retro-inverted neurotrophic and analgesic peptides

AB The present invention describes retro-inverted (RI) peptides encompassing

the active neurotrophic region of saposin C stimulating neurite outgrowth

and prevent neural cell death, and also promoting increased myelination in neural cells. The retro-inverted peptides can be used for stimulating neuritogenesis or preventing cell death, for stimulating myelination or preventing demyelination, or for treating pain in mammals. The RI peptidase may be used in the treatment of Parkinson's disease, retinal neuropathy, multiple sclerosis, acute disseminated leukoencephalitis, trauma to the brain and/or spinal cord, progressive multifocal leukoencephalitis, metachromatic leukodystrophy, adrenal leukodystrophy and maldevelopment of the white matter in premature infants (periventricular leucomalacia). The major advantage of retro inverted (RI) peptides is their enhanced activity in vivo due to improved resistance to proteolytic degradation. The present sequence represents a peptide from the present invention.

ACCESSION NUMBER: AAW99845 peptide DGENE

TITLE: Retro-inverted neurotrophic and analgesic peptides

INVENTOR: O'Brien J S; White M T; Wright D E

PATENT ASSIGNEE: (MYEL-N)MYELOS NEUROSCIENCES CORP.

PATENT INFO: WO 980967 A1 19990318
APPLICATION INFO: WO 1998-18759 19980909
PRIORITY INFO: US 1998-148030 19980903
US 1997-926015 19970909
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 1999-229223 [19]

37p

L1 ANSWER 18 OF 28 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD

TI Retro-inverted neurotrophic and analgesic peptides

AB The present invention describes retro-inverted (RI) peptides encompassing

the active neurotrophic region of saposin C stimulating neurite outgrowth

and prevent neural cell death, and also promoting increased myelination in neural cells. The retro-inverted peptides can be used for stimulating neuritogenesis or preventing cell death, for stimulating myelination or preventing demyelination, or for treating pain in mammals. The RI peptidase may be used in the treatment of Parkinson's disease, retinal neuropathy, multiple sclerosis, acute disseminated leukoencephalitis, trauma to the brain and/or spinal cord, progressive multifocal leukoencephalitis, metachromatic leukodystrophy, adrenal leukodystrophy and maldevelopment of the white matter in premature infants (periventricular leucomalacia). The major advantage of retro inverted (RI) peptides is their enhanced activity in vivo due to improved resistance to proteolytic degradation. The present sequence represents a peptide from the present invention.

ACCESSION NUMBER: AAW99844 peptide DGENE

TITLE: Retro-inverted neurotrophic and analgesic peptides

INVENTOR: O'Brien J S; White M T; Wright D E

PATENT ASSIGNEE: (MYEL-N)MYELOS NEUROSCIENCES CORP.

PATENT INFO: WO 9912967 A1 19990318

37p

APPLICATION INFO: WO 1998-US18759 19980909

PRIORITY INFO: US 1998-148030 19980903

US 1997-926015 19970909

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: 1999-229223 [19]

L1 ANSWER 19 OF 28 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD

TI Retro-inverted neurotrophic and analgesic peptides

AB The present invention describes retro-inverted (RI) peptides encompassing

the active neurotrophic region of saposin C stimulating neurite outgrowth

and prevent neural cell death, and also promoting increased myelination in neural cells. The retro-inverted peptides can be used for stimulating neuritogenesis or preventing cell death, for stimulating myelination or preventing demyelination, or for treating pain in mammals. The RI peptidase may be used in the treatment of Parkinson's disease, retinal neuropathy, multiple sclerosis, acute disseminated leukoencephalitis, trauma to the brain and/or spinal cord, progressive multifocal leukoencephalitis, metachromatic leukodystrophy, adrenal leukodystrophy and maldevelopment of the white matter in premature infants (periventricular leucomalacia). The major advantage of retro inverted (RI) peptides is their enhanced activity in vivo due to improved resistance to proteolytic degradation. The present sequence represents a peptide from the present invention.

ACCESSION NUMBER: AAW99843 peptide DGENE

TITLE: Retro-inverted neurotrophic and analgesic peptides

INVENTOR: O'Brien J S; White M T; Wright D E

PATENT ASSIGNEE: (MYEL-N)MYELOS NEUROSCIENCES CORP.

PATENT INFO: WO 9912967 A1 19990318

37p

APPLICATION INFO: WO 1998-US18759 19980909

PRIORITY INFO: US 18-148030 19980903
US 18-926015 19970909
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 1999-229223 [19]

L1 ANSWER 20 OF 28 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD

TI Retro-inverted neurotrophic and analgesic peptides

AB The present invention describes retro-inverted (RI) peptides encompassing

the active neurotrophic region of saposin C stimulating neurite outgrowth

and prevent neural cell death, and also promoting increased myelination in neural cells. The retro-inverted peptides can be used for stimulating neuritogenesis or preventing cell death, for stimulating myelination or preventing demyelination, or for treating pain in mammals. The RI peptidase may be used in the treatment of Parkinson's disease, retinal neuropathy, multiple sclerosis, acute disseminated leukoencephalitis, trauma to the brain and/or spinal cord, progressive multifocal leukoencephalitis, metachromatic leukodystrophy, adrenal leukodystrophy and maldevelopment of the white matter in premature infants (periventricular leucomalacia). The major advantage of retro inverted (RI) peptides is their enhanced activity in vivo due to improved resistance to proteolytic degradation. The present sequence represents a peptide from the present invention.

ACCESSION NUMBER: AAW99842 peptide DGENE

TITLE: Retro-inverted neurotrophic and analgesic peptides

INVENTOR: O'Brien J S; White M T; Wright D E

PATENT ASSIGNEE: (MYEL-N)MYELOS NEUROSCIENCES CORP.

PATENT INFO: WO 9912967 A1 19990318

37p

APPLICATION INFO: WO 1998-US18759 19980909

PRIORITY INFO: US 1998-148030 19980903

US 1997-926015 19970909

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: 1999-229223 [19]

L1 ANSWER 21 OF 28 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD

TI **Retro-inverted peptide** used to deliver

active agents across the gastrointestinal tract to treat hypertension, diabetes, osteoporosis, hemophilia, anemia, cancer, migraines and angina pectoris.

AN 2000-400037 [34] WPIDS

AB WO 200031123 A UPAB: 20000718

NOVELTY - A **retro-inverted peptide** (I) or a derivative of it, which specifically binds to the gastro-intestinal tract receptor HPT1, hPEPT1, D2H or hSI, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a **retro-inverted peptide** (II) which enhances delivery of an active agent across the gastro-intestinal tract into the systemic, portal or hepatic circulation;

(2) a composition, comprising (I) or (II), bound to a material comprising an active agent used to treat a mammalian disease or disorder;

(3) a composition, comprising a chimeric protein bound to a material comprising an active agent used to treat a mammalian disease or disorder, the protein comprises ZElan 144, ZElan 145 or ZElan 146, or a binding portion of them fused via a covalent bond to a second protein;

(4) a composition, comprising (I) or (II) bound to a drug containing particle;

(5) a pharmaceutical composition, comprising the composition of (2) in a carrier for use in vivo in humans;

(6) an antibody, or a fragment of it, capable of immunospecifically binding (I) or (II);

(7) a composition comprising (I) or (II) coated onto, absorbed onto or covalently bonded to, the surface of a nano- or microparticle; and

(8) a nano- or microparticle formed from (I) or (II).

ACTIVITY - Hypotensive; antidiabetic; osteopathic; hemostatic; antianemic; cytostatic; antimigraine; antianginal.

MECHANISM OF ACTION - The retro-inversion peptides target gastrointestinal tract transport receptors to promote in vivo uptake of active agents and/or enhance active agent delivery across the tract into the systemic circulation.

USE - The gastrointestinal agents are used to facilitate transport of

active ingredients through human or animal gastrointestinal tissue, from the lumen to the portal, hepatic, or systemic circulation (claimed). The compositions containing these agents can be used to treat or prevent mammalian, especially human, diseases or disorders, especially hypertension, diabetes, osteoporosis, hemophilia, anemia, cancer, migraine, and angina pectoris (claimed). The compositions can be administered in vivo to image selected sites or tissues, such as the gastrointestinal tract, by using an imaging agent as the active agent.

The antibodies can be used for imaging peptides after in vivo administration, to monitor treatment efficacy, to measure peptide levels in physiological samples, and in diagnostic methods.

ADVANTAGE - None given.

Dwg. 0/2

ACCESSION NUMBER: 2000-400037 [34] WPIDS

DOC. NO. CPI: C2000-120829

TITLE: **Retro-inverted peptide** used to deliver active agents across the gastrointestinal tract to treat hypertension, diabetes, osteoporosis, hemophilia, anemia, cancer, migraines and angina pectoris.

DERWENT CLASS: B04

INVENTOR(S): O'MAHONY, D J

PATENT ASSIGNEE(S): (ELAN-N) ELAN CORP PLC

COUNTRY COUNT: 91

PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|------|--------------------|------|----|----|
| WO 2000031123 | A2 | 20000602 (200034)* | EN | 36 | |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL | | | | | |
| OA PT SD SE SL SZ TZ UG ZW | | | | | |
| W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES | | | | | |
| FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS | | | | | |
| LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL | | | | | |
| TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW | | | | | |
| AU 2000011744 | A | 20000613 (200043) | | | |
| EP 1131344 | A2 | 20010912 (200155) | EN | | |
| R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT | | | | | |
| RO SE SI | | | | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|------|----------------|----------|
| WO 2000031123 | A2 | WO 1999-IE117 | 19991119 |
| AU 2000011744 | A | AU 2000-11744 | 19991119 |
| EP 1131344 | A2 | EP 1999-972640 | 19991119 |
| | | WO 1999-IE117 | 19991119 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|-----------|------|-----------|
|-----------|------|-----------|

PRIORITY APPLN. INFO: US 1998-109038P 19981119

L1 ANSWER 22 OF 28 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
TI Retro-inverted tri peptide cpds. - useful as hypotensive tranquillising
and analgesic agents.

AN 1986-286129 [44] WPIDS

AB EP 199379 A UPAB: 19930922

Tripeptides with at least a **retro-inverted peptide** bond, pharmaceutically acceptable basic salts, esters or alkyl amides, of formula (I) are new (where Q1 and Q2 = -CONH- or -NHCO-, at least 1 being -NHCO-; R1 is H, 1-7C alkyl, aryl, hydroxyalkyl, hydroxyarylalkyl, guanidylalkyl, aminoalkyl, alkoxyalkyl, acylaminoalkyl, imidazolylalkyl, indolylalkyl, mercaptoalkyl, alkylmercaptoalkyl, carbamoylalkyl, carboxyalkyl, alkylcarbamoylalkyl or alkoxy-carbonylalkyl; R2 is p-hydroxybenzyl, benzyl or a gp. of formula (II); Z is OH, OR3, NH2 or NHR3; and R3 is 1-10C alkyl).

USE/ADVANTAGE - (I) are retro-inverse analogues of Glp-Leu-Trp-OH with hypotensive, tranquilliser and analgesic activities and with reduced tendency to inactivation by circulating peptidase enzymes. Hypotensive doses are e.g. 0.1-400, pref. 2-300 mg/kg/day, pref. in 2-4 units. Admin. may be p.o. or parenterally.

0/0

ABEQ EP 199379 B UPAB: 19930922

Tripeptide with at least a retro-inverted peptidic bond, its pharmaceutically acceptable basic salts, esters or alkyl amides, definable

by means of the following general formulae; Ia, Ib, Ic; R1 represents a hydrogen atom, an alkyl group with a maximum of 7 carbon atoms, an aryl,

hydroxyalkyl or hydroxyarylalkyl, guanidylalkyl, amino-alkyl, alkyloxy-alkyl, acylamino-alkyl, imidazolylalkyl, indolyl-alkyl, mercapto-alkyl, alkylmercaptoalkyl, carbamoylalkyl, carboxyalkyl, alkyl-carbamoylalkyl or alky-loxy-carbonylalkyl group; R2 represents a

gp.

(i), (ii) or (iii) group; Z represents an OH, OR3, NH2, NHR3 group, wherein R3 represents an alkyl group with a number of carbon atoms comprised within the range of from 1 to 10.

ABEQ US 4748155 A UPAB: 19930922

Tripeptides of formulae (I), (II) and (III) are claimed, where R1 is -CH2-CH(CH3)2, -CH(CH3)2 or -CH(CH3)CH2CH3; R2 is (p-hydroxy)benzyl or a gp. of formula (IV), and Z is OH, OR3 NH2, or NHR3, where R3 is 1-10C alkyl.

USE/ADVANTAGE - (I) is used to treat hypertension, anxiety and pain. They are less labile than prior tripeptides used for this purpose.

ACCESSION NUMBER: 1986-286129 [44] WPIDS

DOC. NO. CPI: C1986-123788

TITLE: Retro-inverted tri peptide cpds. - useful as hypotensive tranquillising and analgesic agents.

DERWENT CLASS: B05

INVENTOR(S): DELUCA, G; DISTAZIO, G; POLITI, V; SISTO, A; VERDINI, A S; VIRDIA, A

PATENT ASSIGNEE(S): (ENIE) ENIRICERCHE SPA; (POLI-N) POLIFARMA SPA

COUNTRY COUNT: 7

PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|-------------|------|----------|-----------|----|----|
| EP 199379 | A | 19861029 | (198644)* | EN | 18 |
| R: DE FR GB | | | | | |
| JP 61233665 | A | 19861017 | (198648) | | |

US 4748155 A 880531 (198824)
 EP 199379 B 901003 (199040)
 R: DE FR GB
 IT 1184164 B 19871022 (199041)
 DE 3674623 G 19901108 (199046)
 JP 06088968 B2 19941109 (199443) 13

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|-------------|------|----------------|----------|
| EP 199379 | A | EP 1986-200345 | 19860307 |
| JP 61233665 | A | JP 1986-59653 | 19860319 |
| US 4748155 | A | US 1986-838120 | 19860310 |
| JP 06088968 | B2 | JP 1986-59653 | 19860319 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|-------------|-------------|-------------|
| JP 06088968 | B2 Based on | JP 61233665 |

PRIORITY APPLN. INFO: IT 1985-19961 19850319

L1 ANSWER 23 OF 28 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
 TI New retro-inverted analogues of bradykinin potentiator penta peptide -
 useful as prolonged action antihypertensives and diagnostic agents.
 AN 1986-198158 [31] WPIDS
 AB EP 185433 A UPAB: 19930922
 Retro-inverted peptides of formula (I) useful as anti-hypertensives and
 diagnostics are new. R2, R3 = D-amino acid residues; R1 = side-chain of
 an amino acid residue present in a natural peptide or its analogue; A = H,
 1-7C alkyl, aryl, aralkyl or hydroxyalkyl; B = H, 1-7C alkyl, aryl,
 aralkyl, or OH-, guanidyl-, amino-, alkoxy-, acylamino-, imidazolyl-,
 indolyl-, SH-, alkylthio-, CONH2-, COOH-, alkylcarbamoyl or
 alkoxycarbonyl-alkyl; or A+B = (CH2)m, in which one of the C atoms is
 directly bonded to PhCH2O or PhS; m = 3 or 4; Z = OH, alkoxy or NH2.
 (I) in which R1 = Me, R2 = D-Phe, R3 = D-Lys and NA-CHB-COZ =
 Pro(4-allo-S-Ph)-OH, in (S)- or (R)-forms, is specifically claimed.
 USE/ADVANTAGE - (I) are analogues of bradykinin potentiator
 pentapeptide and they inhibit angiotensin-converting enzyme and have more
 prolonged activity in vivo. They are therefore useful as
 antihypertensives
 and diagnostic agents.
 0/0
 ABEQ US 4713367 A UPAB: 19930922
 Partially retroinverso peptides of formula (I), analogues of bradykinin
 potentiating peptide (BPPalpha), and salts are new. In (I), R1 and R2 are
 each the side chain of one of corresp natural peptides; X is -X-Ph or
 O-CH2-PH; Z is OH, alkoxy, NH2. Pref cpds are Glp-Lys-gPhe-mAla Pro
 (4-allo-S-Ph)-OH and Glp-Lys-gPhe-m(S) Ala-Pro (4-allo-S-Ph)-OH. (I) may
 be prepd e.g. by condensing N-mono-acetylated gem diamine cpd (II) with
 peptide (III).
 USE - (I) are more stable angiotensin-converting enzyme inhibitors
 than natural ACE inhibitor and are used as antihypertensives at dosage
 e.g. 1-1000(2.5-100) mg/day.
 ABEQ US 4728725 A UPAB: 19930922
 Retro-inverted peptide analogues of
 Bradykinin Potentiator Pentapeptide (BPP5a) of formula (I) are new.
 In (I), R3 is D-Lys; R2 is D-Phe; R1 is natural peptide amino acid
 side chain; A and B together are (CH2)m residue forming ring with bonded
 N or C atoms and with one C of (CH2)m-bridge directly bonded to O-Bz or

S-Ph; m is 3 or 4 and Z is OH, alkylOH or NH2.

Esp. cpds. (Ia) and (Ib). (I) may be prep. e.g. by liq. phase condensation of (II) with (III) using condensation agents.

USE - (I) are mixed inhibitors of ACE, recognising both C and N terminals, the retro-inversion giving increased stability against peptidases, and are used as highly active antihypertensives and diagnostics.

ACCESSION NUMBER: 1986-198158 [31] WPIDS
DOC. NO. CPI: C1986-085243
TITLE: New retro-inverted analogues of bradykinin potentiator penta peptide - useful as prolonged action antihypertensives and diagnostic agents.
DERWENT CLASS: B03 P24
INVENTOR(S): SISTO, A; VERDINI, A S; VIRDIA, A
PATENT ASSIGNEE(S): (ENIE) ENICHEM SPA; (ENIR-N) ENIRECERCHE SPA; (VEDU-N) VERDUCCI G SRL; (VERD-N) VERDUCCI SRL G
COUNTRY COUNT: 13
PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|-------------------------------------|------|----------|-----------|----|----|
| EP 185433 | A | 19860625 | (198631)* | EN | 8 |
| R: AT BE CH DE FR GB IT LI LU NL SE | | | | | |
| FR 2575048 | A | 19860627 | (198632) | | |
| JP 61155395 | A | 19860715 | (198634) | | |
| JP 62501610 | W | 19870702 | (198732) | | |
| US 4713367 | A | 19871215 | (198806) | | |
| US 4728725 | A | 19880301 | (198812) | | |
| IT 1178789 | B | 19870916 | (199035) | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|-------------|------|----------------|----------|
| EP 185433 | A | EP 1985-202099 | 19851218 |
| JP 61155395 | A | JP 1985-289135 | 19851221 |
| US 4713367 | A | US 1986-821449 | 19860122 |
| US 4728725 | A | US 1985-811487 | 19851220 |

PRIORITY APPLN. INFO: IT 1984-24200 19841221

L1 ANSWER 24 OF 28 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD

TI Totally solid phase synthesis of peptide(s) - contg. **retro-inverted peptide** bond, using crosslinked sarcosinyl copolymer as support.

AN 1984-012770 [03] WPIDS

AB EP 97994 A UPAB: 19930925

The support comprises polydimethylacrylamide -co-acryloylsarcosine methyl ester crosslinked with N,N'-ethylene bis-acrylamide. The polypeptide (I) chain is constructed, starting from the C terminus, by condensation with amino acid and/or peptide derivs. and cpds. of formula (II) (Z and Z' are side chains present in naturally-occurring amino acids).

The cpd. I, I-bis(trifluoroacetyl) iodobenzene (III) is then used to convert terminal prim. carboxyamido gps. to amino, and finally the entire peptide is released from the resin simultaneous with removal of amine and side chain protecting gp.

Esp. the method is used to make cpd. PyroGlu-Phe-gPhe-mGly -Leu-Met-NH2 (Ia) (gPhe is gem-diaminophenylalanyl; mGly is malonyl).

Since (III) converts amido gps. on the resin, the synthesis can be done entirely in the solid phase. The method is simple and rapid; suitable

for automation and avoids the losses associated with usual isolation and purification stages. (I) have biological activity equal or better than

tht

of their natural analogues and will improved resistance to enzymatic hydrolysis.

0/0

ABEQ EP 97994 B UPAB: 19930925

The support comprises polydimethylacrylamide -co-acryloylsarcosine methyl ester crosslinked with N,N'-ethylene bis-acrylamide. The polypeptide (I) chain is constructed, starting from the C terminus, by condensation with amino acid and/or peptide derivs. and cpds. of formula (II) (Z and Z' are side chains present in naturally-occurring amino acids).

The cpd. I, I-bis(trifluoroacetyl) iodobenzene (III) is then used to convert terminal prim. carboxamide gps. to amino, and finally the entire peptide is released from the resin simultaneous with removal of amine and side chain protecting gp.

Esp. the method is used to make cpd. PyroGlu-Phe-gPhe-mGly -Leu-Met-NH₂ (Ia) (gPhe is gem-diaminophenylalanyl; mGly is malonyl).

Since (III) converts amido gps. on the resin, the synthesis can be done entirely in the solid phase. The method is simple and rapid;

suitable

for automation and avoids the losses associated with usual isolation and purification stages. (I) have biological activity equal or better than

tht

of their natural analogues and will improved resistance to enzymatic hydrolysis.

0/0

ACCESSION NUMBER: 1984-012770 [03] WPIDS

DOC. NO. CPI: C1984-005381

TITLE: Totally solid phase synthesis of peptide(s) - contg.

retro-inverted peptide bond,

using crosslinked sarcosinyl copolymer as support.

DERWENT CLASS: A96 B04

INVENTOR(S): PESSI, A; PINORI, M; VERDINI, A S; VISCOMI, G C

PATENT ASSIGNEE(S): (ANIS) ANIC SPA; (ASRN) ASSORENI; (ENIE) ENICHEM SPA

COUNTRY COUNT: 11

PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|----------------------------------|------|----------|-----------|----|----|
| EP 97994 | A | 19840111 | (198403)* | EN | 29 |
| R: AT BE CH DE FR GB LI LU NL SE | | | | | |
| EP 97994 | B | 19870930 | (198739) | EN | |
| R: AT BE CH DE FR GB LI LU NL SE | | | | | |
| DE 3373908 | G | 19871105 | (198745) | | |
| IT 1190891 | B | 19880224 | (199050) | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|-----------|------|----------------|----------|
| EP 97994 | A | EP 1983-200889 | 19830617 |

PRIORITY APPLN. INFO: IT 1982-22046 19820624

L1 ANSWER 25 OF 28 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD

TI **Retro-inverted peptide** used to deliver active agents across the gastrointestinal tract to treat hypertension, diabetes, osteoporosis, hemophilia, anemia, cancer, migraines and angina pectoris.

AN 2000-400037 [34] WPIX

AB WO 200031123 A UPAB: 20000718

NOVELTY - A **retro-inverted peptide** (I) or a derivative of it, which specifically binds to the gastro-intestinal tract receptor HPT1, hPEPT1, D2H or hSI, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the

following:

- (1) a **retro-inverted peptide** (II) which enhances delivery of an active agent across the gastro-intestinal tract into the systemic, portal or hepatic circulation;
- (2) a composition, comprising (I) or (II), bound to a material comprising an active agent used to treat a mammalian disease or disorder;
- (3) a composition, comprising a chimeric protein bound to a material comprising an active agent used to treat a mammalian disease or disorder, the protein comprises ZElan 144, ZElan 145 or ZElan 146, or a binding portion of them fused via a covalent bond to a second protein;
- (4) a composition, comprising (I) or (II) bound to a drug containing particle;
- (5) a pharmaceutical composition, comprising the composition of (2) in a carrier for use in vivo in humans;
- (6) an antibody, or a fragment of it, capable of immunospecifically binding (I) or (II);
- (7) a composition comprising (I) or (II) coated onto, absorbed onto or covalently bonded to, the surface of a nano- or microparticle; and
- (8) a nano- or microparticle formed from (I) or (II).

ACTIVITY - Hypotensive; antidiabetic; osteopathic; hemostatic; antianemic; cytostatic; antimigraine; antianginal.

MECHANISM OF ACTION - The retro-inversion peptides target gastrointestinal tract transport receptors to promote in vivo uptake of active agents and/or enhance active agent delivery across the tract into the systemic circulation.

USE - The gastrointestinal agents are used to facilitate transport of

active ingredients through human or animal gastrointestinal tissue, from the lumen to the portal, hepatic, or systemic circulation (claimed). The compositions containing these agents can be used to treat or prevent mammalian, especially human, diseases or disorders, especially hypertension, diabetes, osteoporosis, hemophilia, anemia, cancer, migraine, and angina pectoris (claimed). The compositions can be administered in vivo to image selected sites or tissues, such as the gastrointestinal tract, by using an imaging agent as the active agent.

The

antibodies can be used for imaging peptides after in vivo administration, to monitor treatment efficacy, to measure peptide levels in physiological samples, and in diagnostic methods.

ADVANTAGE - None given.

Dwg. 0/2

ACCESSION NUMBER: 2000-400037 [34] WPIX
DOC. NO. CPI: C2000-120829
TITLE: **Retro-inverted peptide** used
to deliver active agents across the gastrointestinal tract to treat hypertension, diabetes, osteoporosis, hemophilia, anemia, cancer, migraines and angina pectoris.
DERWENT CLASS: B04
INVENTOR(S): O'MAHONY, D J
PATENT ASSIGNEE(S): (ELAN-N) ELAN CORP PLC
COUNTRY COUNT: 91
PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|------|----------|-----------|----|----|
| ----- | | | | | |
| WO 2000031123 | A2 | 20000602 | (200034)* | EN | 36 |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL | | | | | |
| OA PT SD SE SL SZ TZ UG ZW | | | | | |
| W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES | | | | | |
| FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS | | | | | |
| LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL | | | | | |
| TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW | | | | | |
| AU 2000011744 | A | 20000613 | (200043) | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|------|----------------|----------|
| WO 2000031123 | A2 | WO 1999-IE117 | 19991119 |
| AU 2000011744 | A | AU 2000-11744 | 19991119 |
| EP 1131344 | A2 | EP 1999-972640 | 19991119 |
| | | WO 1999-IE117 | 19991119 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|--------------|
| AU 2000011744 | A Based on | WO 200031123 |
| EP 1131344 | A2 Based on | WO 200031123 |

PRIORITY APPLN. INFO: US 1998-109038P 19981119

L1 ANSWER 26 OF 28 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD
 TI Retro-inverted tri peptide cpds. - useful as hypotensive tranquillising
 and analgesic agents.
 AN 1986-286129 [44] WPIX
 AB EP 199379 A UPAB: 19930922
 Tripeptides with at least a **retro-inverted**
peptide bond, pharmaceutically acceptable basic salts, esters or
 alkyl amides, of formula (I) are new (where Q1 and Q2 = -CONH- or -NHCO-,
 at least 1 being -NHCO-; R1 is H, 1-7C alkyl, aryl, hydroxyalkyl,
 hydroxyarylalkyl, guanidylalkyl, aminoalkyl, alkoxyalkyl, acylaminoalkyl,
 imidazolylalkyl, indolylalkyl, mercaptoalkyl, alkylmercaptoalkyl,
 carbamoylalkyl, carboxyalkyl, alkylcarbamoylalkyl or alkoxy-carbonylalkyl;
 R2 is p-hydroxybenzyl, benzyl or a gp. of formula (II); Z is OH, OR3, NH2
 or NHR3; and R3 is 1-10C alkyl).

USE/ADVANTAGE - (I) are retro-inverse analogues of Glp-Leu-Trp-OH
 with hypotensive, tranquilliser and analgesic activities and with reduced
 tendency to inactivation by circulating peptidase enzymes. Hypotensive
 doses are e.g. 0.1-400, pref. 2-300 mg/kg/day, pref. in 2-4 units. Admin.
 may be p.o. or parenterally.

0/0

ABEQ EP 199379 B UPAB: 19930922
 Tripeptide with at least a retro-inverted peptidic bond, its
 pharmaceutically acceptable basic salts, esters or alkyl amides,
 definable
 by means of the following general formulae; Ia, Ib, Ic; R1 represents a
 hydrogen atom, an alkyl group with a maximum of 7 carbon atoms, an
 aryl,
 hydroxyalkyl or hydroxyarylalkyl, guanidylalkyl, amino-alkyl,
 alkyloxy-alkyl, acylamino-alkyl, imidazolylalkyl, indolyl-alkyl, mercapto-
 alkyl, alkylmercaptoalkyl, carbamoylalkyl, carboxyalkyl,
 alkyl-carbamoylalkyl or alky-loxy-carbonylalkyl group; R2 represents a
 gp.
 (i), (ii) or (iii) group; Z represents an OH, OR3, NH2, NHR3 group,
 wherein R3 represents an alkyl group with a number of carbon atoms
 comprised within the range of from 1 to 10.

ABEQ US 4748155 A UPAB: 19930922
 Tripeptides of formulae (I), (II) and (III) are claimed, where R1 is
 -CH2-CH(CH3)2, -CH(CH3)2 or -CH(CH3)CH2CH3; R2 is (p-hydroxy)benzyl or a
 gp. of formula (IV), and Z is OH, OR3 NH2, or NHR3, where R3 is 1-10C
 alkyl.

USE/ADVANTAGE - (I) is used to treat hypertension, anxiety and pain.
 They are less labile than prior tripeptides used for this purpose.

ACCESSION NUMBER: 1556-286129 [44] WPIX
 DOC. NO. CPI: 0086-123788
 TITLE: Retro-inverted tri peptide cpds. - useful as hypotensive
 tranquillising and analgesic agents.
 DERWENT CLASS: B05
 INVENTOR(S): DELUCA, G; DISTAZIO, G; POLITI, V; SISTO, A; VERDINI, A
 S; VIRDIA, A
 PATENT ASSIGNEE(S): (ENIE) ENIRICERCHE SPA; (POLI-N) POLIFARMA SPA
 COUNTRY COUNT: 7
 PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|-------------|------|----------|-----------|----|----|
| EP 199379 | A | 19861029 | (198644)* | EN | 18 |
| R: DE FR GB | | | | | |
| JP 61233665 | A | 19861017 | (198648) | | |
| US 4748155 | A | 19880531 | (198824) | | |
| EP 199379 | B | 19901003 | (199040) | | |
| R: DE FR GB | | | | | |
| IT 1184164 | B | 19871022 | (199041) | | |
| DE 3674623 | G | 19901108 | (199046) | | |
| JP 06088968 | B2 | 19941109 | (199443) | | 13 |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|-------------|------|----------------|----------|
| EP 199379 | A | EP 1986-200345 | 19860307 |
| JP 61233665 | A | JP 1986-59653 | 19860319 |
| US 4748155 | A | US 1986-838120 | 19860310 |
| JP 06088968 | B2 | JP 1986-59653 | 19860319 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|-------------|-------------|-------------|
| JP 06088968 | B2 Based on | JP 61233665 |

PRIORITY APPLN. INFO: IT 1985-19961 19850319

L1 ANSWER 27 OF 28 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD
 TI New retro-inverted analogues of bradykinin potentiator penta peptide -
 useful as prolonged action antihypertensives and diagnostic agents.
 AN 1986-198158 [31] WPIX
 AB EP 185433 A UPAB: 19930922
 Retro-inverted peptides of formula (I) useful as anti-hypertensives and
 diagnostics are new. R2, R3 = D-amino acid residues; R1 = side-chain of
 an amino acid residue present in a natural peptide or its analogue; A = H,
 1-7C alkyl, aryl, aralkyl or hydroxyalkyl; B = H, 1-7C alkyl, aryl,
 aralkyl, or OH-, guanidyl-, amino-, alkoxy-, acylamino-, imidazolyl-,
 indolyl-, SH-, alkylthio-, CONH2-, COOH-, alkylcarbamoyl or
 alkoxy carbonyl-alkyl; or A+B = (CH2)m, in which one of the C atoms is
 directly bonded to PhCH2O or PhS; m = 3 or 4; Z = OH, alkoxy or NH2.
 (I) in which R1 = Me, R2 = D-Phe, R3 = D-Lys and NA-CHB-COZ =
 Pro(4-allo-S-Ph)-OH, in (S)- or (R)-forms, is specifically claimed.
 USE/ADVANTAGE - (I) are analogues of bradykinin potentiator
 pentapeptide and they inhibit angiotensin-converting enzyme and have more
 prolonged activity in vivo. They are therefore useful as
 antihypertensives
 and diagnostic agents.
 0/0
 ABEQ US 4713367 A UPAB: 19930922
 Partially retroinverso peptides of formula (I), analogues of bradykinin

potentiating peptide (BPPalpha), and salts are new. In (I), R1 and R2 are each the side chain of one of corresp natural peptides; X is -X-Ph or O-CH2-Ph; Z is OH, alkoxy, NH2. Pref cpds are Glp-Lys-gPhe-mAla Pro (4-allo-S-Ph)-OH and Glp-Lys-gPhe-m(S) Ala-Pro (4-allo-S-Ph)-OH. (I) may be prepd e.g. by condensing N-mono-acetylated gem diamine cpd (II) with peptide (III).

USE - (I) are more stable angiotensin-converting enzyme inhibitors than natural ACE inhibitor and are used as antihypertensives at dosage e.g. 1-1000(2.5-100) mg/day.

ABEQ US 4728725 A UPAB: 19930922

Retro-inverted peptide analogues of Bradykinin Potentiator Pentapeptide (BPP5a) of formula (I) are new.

In (I), R3 is D-Lys; R2 is D-Phe; R1 is natural peptide amino acid side chain; A and B together are (CH2)m residue forming ring with bonded

N

or C atoms and with one C of (CH2)m-bridge directly bonded to O-Bz or S-Ph; m is 3 or 4; and Z is OH, alkylOH or NH2.

Esp. cpds. are (Ia) and (Ib). (I) may be prepd. e.g. by liq. phase condensation of (II) with (III) using condensation agents.

USE - (I) are mixed inhibitors of ACE, recognising both C and N terminals, the retro-inversion giving increased stability against peptidases, and are used as highly active antihypertensives and diagnostics.

ACCESSION NUMBER: 1986-198158 [31] WPIX

DOC. NO. CPI: C1986-085243

TITLE: New retro-inverted analogues of bradykinin potentiator penta peptide - useful as prolonged action antihypertensives and diagnostic agents.

DERWENT CLASS: B03 P24

INVENTOR(S): SISTO, A; VERDINI, A S; VIRDIA, A

PATENT ASSIGNEE(S): (ENIE) ENICHEM SPA; (ENIR-N) ENIRECERCHE SPA; (VEDU-N) VERDUCCI G SRL; (VERD-N) VERDUCCI SRL G

COUNTRY COUNT: 13

PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|-------------------------------------|------|----------|-----------|----|----|
| EP 185433 | A | 19860625 | (198631)* | EN | 8 |
| R: AT BE CH DE FR GB IT LI LU NL SE | | | | | |
| FR 2575048 | A | 19860627 | (198632) | | |
| JP 61155395 | A | 19860715 | (198634) | | |
| JP 62501610 | W | 19870702 | (198732) | | |
| US 4713367 | A | 19871215 | (198806) | | |
| US 4728725 | A | 19880301 | (198812) | | |
| IT 1178789 | B | 19870916 | (199035) | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|-------------|------|----------------|----------|
| EP 185433 | A | EP 1985-202099 | 19851218 |
| JP 61155395 | A | JP 1985-289135 | 19851221 |
| US 4713367 | A | US 1986-821449 | 19860122 |
| US 4728725 | A | US 1985-811487 | 19851220 |

PRIORITY APPLN. INFO: IT 1984-24200 19841221

L1 ANSWER 28 OF 28 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD

TI Totally solid phase synthesis of peptide(s) - contg. **retro-inverted peptide** bond, using crosslinked sarcosinyl copolymer as support.

AN 1984-012770 [03] WPIX

AB EP 97994 A UPAB: 19930925

The support comprises polydimethylacrylamide -co-acryloylsarcosine methyl ester crosslinked with N,N'-ethylene bis-acrylamide. The polypeptide (I) chain is constructed, starting from the C terminus, by condensation with amino acid and/or peptide derivs. and cpds. of formula (II) (Z and Z' are side chains present in naturally-occurring amino acids).

The cpd. I, I-bis(trifluoroacetyl) iodobenzene (III) is then used to convert terminal prim. carboxyamides to amino, and finally the entire peptide is released from the resin simultaneously with removal of amine and side chain protecting gp.

Esp. the method is used to make cpd. PyroGlu-Phe-gPhe-mGly -Leu-Met-NH₂ (Ia) (gPhe is gem-diaminophenylalanyl; mGly is malonyl).

Since (III) converts amide gps. on the resin, the synthesis can be done entirely in the solid phase. The method is simple and rapid;

suitable

for automation and avoids the losses associated with usual isolation and purification stages. (I) have biological activity equal or better than

tht

of their natural analogues and will improved resistance to enzymatic hydrolysis.

0/0

ABEQ EP 97994 B UPAB: 19930925

The support comprises polydimethylacrylamide -co-acryloylsarcosine methyl ester crosslinked with N,N'-ethylene bis-acrylamide. The polypeptide (I) chain is constructed, starting from the C terminus, by condensation with amino acid and/or peptide derivs. and cpds. of formula (II) (Z and Z' are side chains present in naturally-occurring amino acids).

The cpd. I, I-bis(trifluoroacetyl) iodobenzene (III) is then used to convert terminal prim. carboxyamides to amino, and finally the entire peptide is released from the resin simultaneously with removal of amine and side chain protecting gp.

Esp. the method is used to make cpd. PyroGlu-Phe-gPhe-mGly -Leu-Met-NH₂ (Ia) (gPhe is gem-diaminophenylalanyl; mGly is malonyl).

Since (III) converts amide gps. on the resin, the synthesis can be done entirely in the solid phase. The method is simple and rapid;

suitable

for automation and avoids the losses associated with usual isolation and purification stages. (I) have biological activity equal or better than

tht

of their natural analogues and will improved resistance to enzymatic hydrolysis.

0/0

ACCESSION NUMBER: 1984-012770 [03] WPIX

DOC. NO. CPI: C1984-005381

TITLE: Totally solid phase synthesis of peptide(s) - contg. **retro-inverted peptide bond**, using crosslinked sarcosinyl copolymer as support.

DERWENT CLASS: A96 B04

INVENTOR(S): PESSI, A; PINORI, M; VERDINI, A S; VISCOMI, G C

PATENT ASSIGNEE(S): (ANIS) ANIC SPA; (ASRN) ASSORENI; (ENIE) ENICHEM SPA

COUNTRY COUNT: 11

PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|------------|------|-------------------------------|-----------|----|----|
| EP 97994 | A | 19840111 | (198403)* | EN | 29 |
| | R: | AT BE CH DE FR GB LI LU NL SE | | | |
| EP 97994 | B | 19870930 | (198739) | EN | |
| | R: | AT BE CH DE FR GB LI LU NL SE | | | |
| DE 3373908 | G | 19871105 | (198745) | | |
| IT 1190891 | B | 19880224 | (199050) | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|-----------|------|-------------|------|
|-----------|------|-------------|------|

EP 97994

A

EP 1983-200889

30617

PRIORITY APPLN. INFO: IT 1982-22046

19820624